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# REPLY TO SURREBUTTAL TESTIMONY

# OF

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## Prepared on Behalf of Verizon New England Inc.

## d/b/a

## Verizon Massachusetts

## Before the Massachusetts

## Department of Telecommunications and Energy

**November 14, 2001**

# WILLIAM E. TAYLOR

## I. INTRODUCTION AND SUMMARY

Q. What is your name, business address and current position?

A. My name is William E. Taylor. I am Senior Vice President at National Economic Research Associates, Inc. (NERA), head of its telecommunications practice and of its Cambridge office, located at One Main Street, Cambridge, Massachusetts 02142.

Q. Have you testified previously in this Docket?

A. Yes. I filed direct testimony in D.T.E. 01-31 on April 12, 2001, and rebuttal testimony on September 21, 2001. My professional qualifications were attached as Exhibit 1 to my direct testimony.

Q. What is the purpose of this testimony?

A. Verizon Massachusetts ("Verizon MA") has asked me to comment on selected issues raised in the surrebuttal testimonies of John W. Mayo on behalf of AT&T Communications of New England, Inc. and Lee L. Selwyn on behalf of the Office of Attorney General.

Q. Please summarize your primary conclusions.

A. Contrary to the arguments on which the AT&T Motion to File Surrebuttal was based, Dr. Mayo's surrebuttal testimony does not address or clarify (i) any alleged mischaracterization of his earlier testimony by me or (ii) any alleged inappropriate referral to his previous testimonies from an FCC proceeding and/or a prior Department proceeding. Additional conclusions discussed herein are:

?? Contrary to Dr. Mayo's view, in my judgment a requirement to prepare and review the market power analyses he advocates is extreme and exceedingly harsh. It would frustrate the progress of efficient competition in Massachusetts and, in light of evidence provided by Verizon MA, is unnecessary.

- ?? The approach to market power analysis Dr. Mayo advocates relies on measures of market share and supply elasticity. Dr. Mayo himself recognizes the limited usefulness of market share for firms like AT&T or Verizon that "inherited high [market] share." Also, insofar as any competitor can take advantage of resale and unbundling as set forth in the Telecom Act, the supply elasticity is largely irrelevant.

- ?? Bright-line tests can be devised and have been implemented by the FCC. One objective of such tests is to "avoid excessive administrative burdens" that would be part of Dr. Mayo's proposed market power analysis.

- ?? The evidence of competitive access provider entry beginning in the mid 1980s and the continued presence of such providers in Massachusetts undermine Dr. Mayo's assertion that there is insufficient competition for the provision of dedicated access today.

- ?? Dr. Mayo's assertion that Verizon MA access rates are above their economic cost and thus Verizon MA enjoys significant monopoly power over the provision of access cannot be sustained when the evidence is examined. All firms with significant fixed costs set prices above marginal cost. For example, an examination of the price-cost relationship of AT&T long distance service reveals that its per minute mark-up above cost (in what AT&T claims is a competitive long distance market) is about twice the per minute mark-up above carrier access charges and other IXC assessments.

- ?? Dr. Selwyn's surrebuttal testimony describes one firm's experience and thus represents a sample of only one event. Drawing conclusions from a sample of one frequently leads to the wrong conclusion.

## II. DR. MAYO'S SURREBUTTAL TESTIMONY

Q. In its Motion to File Surrebuttal, AT&T requested that the Department amend the procedural schedule in this proceeding to allow AT&T to file surrebuttal testimony in response to your testimony, allegedly because:

1. You mischaracterized the analyses that AT&T's witness, Dr. Mayo, recommends be part of this proceeding, and (it argued) AT&T should have an opportunity, through surrebuttal, to clarify the record on this point; and,

2. Your rebuttal testimony referred to Dr. Mayo's testimony from an FCC proceeding (FCC 95-427) and a prior Department proceeding, D.P.U. 91-79; the use of Dr. Mayo's prior testimony in Taylor's rebuttal was inappropriate because the earlier proceedings were significantly different from the current proceeding; and AT&T should have an opportunity in surrebuttal to explain the differences.

Was either issue addressed in Dr. Mayo's surrebuttal testimony?

A. No.

Q. Dr. Mayo reiterates (at 5) the position he asserted in his direct testimony that "a proper market power inquiry is critical to making sound judgments regarding the presence or absence of effective competition." Please comment.

A. It is clear from our testimony that Dr. Mayo and I disagree about the practical value of information that Verizon MA has already provided the Department. In particular, we disagree about how the Department could use that information to make an appropriately informed determination in this proceeding.

While Dr. Mayo asserts (at 6) that my characterization of AT&T's proposal as 'draconian' is "quite simply, wrong," the literal interpretation of the word is precisely appropriate to the instant case. According to Webster's Dictionary[1], draconian refers to a law or code that is extreme and severe or "exceedingly rigorous and harsh." As discussed in my earlier testimony, Dr. Mayo's proposal, if adopted, would require Verizon MA to prepare and the Department to review 18,000 market power analyses. In my judgment this requirement

[1] Houghton Mifflin Company. Webster's II New Riverside University Dictionary. The Riverside Publishing Company. United States of America, 1984.

would be extreme, and exceedingly harsh. Moreover, it would be unnecessary and would only frustrate the progress of efficient competition in Massachusetts.

Verizon MA has provided substantial evidence that there are no barriers to entry for any telecommunications service at issue in this proceeding in any reasonably defined relevant market in Massachusetts. First, as described in my testimony, recent changes in law and regulation have removed all substantive entry barriers. Second, Messrs. Mudge and Doane have provided the Department with data specifically showing that entry has *actually* occurred in each and every wire center throughout the state. Entry is the best evidence that barriers do not exist and that competition is underway. The presence of competitors is sufficient but not necessary evidence that entry barriers are not so significant as to preclude competition. In light of the evidence, neither of Dr. Mayo's assertions (at 3)—i.e., that the Department's recent "competition-enabling policies" are (i) insufficient to guarantee effective competition and (ii) only partially establish what is required to discipline market power—is supportable.

While I will not repeat all the evidence presented in my rebuttal testimony, it is noteworthy that AT&T and WorldCom currently have networks that stretch across Massachusetts; 98 percent of business customers in Massachusetts are immediately accessible to a competitive service provider by virtue of collocation arrangements in place as of January 31, 2001; and, competitive service providers in Massachusetts operate at least 48 local switches. This information (while not a formal analysis of market power), coupled with evidence regarding the rate at which Verizon MA's lines are lost to competition in general and facilities-based competition in particular (growing at annualized rates of 49 and 56 percent respectively), is, to use a phrase from Dr. Mayo's testimony, *prima facie* evidence that Verizon MA has no market power in the provision of those services being considered in this proceeding.

Q. Dr. Mayo asserts (at 7-8) that Verizon MA (and presumably its expert witnesses) may not appreciate the significance of a formal market power test because your testimony "in support if its quest to deregulate *business* services" presented information about residential lines lost to competition. Please comment.

A. Dr. Mayo may have misunderstood my testimony. The question and answer to which my comment about residential lines lost to competition were associated addressed all the data I thought relevant for the Department to consider when assessing the issue of barriers to entry or expansion, market demand and competitive loses. Verizon MA's operations support systems facilitate CLECs' ordering and installing unbundled elements or resold services for both residential and business customers. The number of residential lines lost to competition is evidence that those systems work and do not pose a substantive barrier to entry.

Q. Dr. Mayo asserts (at 8) that your reference to the Landes and Posner article makes his point because those authors propose "exactly the same methodological approach" that he recommends. In particular, one could rely on an assessment of "an examination of the firm's market share, the elasticity of supply of fringe firms and the market demand elasticity, all of which are more readily determinable than the firm's price elasticity of demand." Please comment.

A. I disagree that these factors (the firm's market share, the elasticity of supply and market demand) are more readily determinable. Analysts can readily marshal facts concerning substitutes for the ILEC's services and the presence and capacity of competitive providers of those services, and the Department can judge the accuracy and relevance of those facts. However, the Department does not have a bright-line test that objectively determines whether market power has eroded enough that consumers would be made better off if the ILEC were granted pricing flexibility. In fact, Dr. Mayo has disagreed with the usefulness of at least one of these measures in his previous filings:

> [I]nformation that, in some cases, might be contained in a market share number at a specific point in time is diluted substantially by the fact that AT&T began the post-divestiture period with an inherited high [market] share. The competitive significance of a market share number…stems from a firm's ability (or lack thereof) to retain a given market share in the wake of an attempt to raise prices to above-competitive levels.[2]

2 *"Is AT&T Dominant"? An Assessment of the Evidence*, by David Kaserman and John Mayo: June 1995, Attachment to AT&T Ex Parte letter from Charles L. Ward to William C. Caton. RE Ex Parte CC Docket 79-252, p. 13

Furthermore, the value of a market share measure in the Landes and Posner approach to evaluating market power requires knowledge of the market share at the firm's profit-maximizing price and output level. Virtually nothing is known about such a measure that pertains to regulated telephone services.

In addition, measures of the elasticity of supply of fringe firms are also affected by the regulated nature of the telephone industry. In particular, such a supply elasticity sets out to measure the response of competitive firms to a small price increase. In general, the higher the elasticity of supply, other things constant, the higher the elasticity of demand facing an incumbent firm will be and hence, the smaller its market power. In the market for retail local telephone services, however, fringe firms can expand their output with virtually no risk or sunk costs by means of resale and unbundled network facilities. Once a competitor collocates in a Verizon MA central office, it can reach all customers that Verizon MA reaches by using unbundled elements purchased at prices that reflect Verizon MA's full economies of scale and scope. Resale and unbundling as set forth in the Telecom Act make the supply elasticity largely irrelevant.

Q. Dr. Mayo (at 7) quotes your testimony that there is no "bright line test that can be used in an adversarial proceeding to determine when competitors discipline the market price sufficiently that the service can be reclassified as competitive," states his agreement and goes on to conclude that this is why it is so important to very carefully adhere to the known principles of market power analysis as he proposes. Is this what you meant in your testimony?

A. No. My testimony was that while "economic theory provides a useful guide to the elements of a competitive analysis, it does not supply a bright-line test" with specific numerical standards for regulators to use when asked to determine if market forces can safely regulate a service. That fact notwithstanding, there are such tests in use and they are not devoid of a basis in economic theory. They are, however, very different from the market power analysis proposed by Dr. Mayo. For example, the FCC relied upon such bright-line triggers when assessing how much flexibility to grant ILECs when pricing interstate special access and dedicated transport.

> For the reasons discussed below, and based on the record before us, we conclude that a collocation-based trigger for granting pricing flexibility for special access and dedicated transport reasonably balances our two goals: (1) having a clear picture of competitive conditions in the MSA, so that we can be certain that there is irreversible investment sufficient to discourage exclusionary pricing behavior; and (2) adopting an easily verifiable, bright-line test to avoid excessive administrative burdens.[3]

Two points are noteworthy. First, the FCC sets out a "collocation-based" trigger to assess if there is irreversible investment sufficient to discourage exclusionary pricing. This is noteworthy because Verizon MA has provided a substantial amount of data about collocation throughout Massachusetts in this proceeding. Second, the FCC is particularly focused on excessive administrative burdens, which I take to include both the number and depth of market power studies in individual product and geographic markets as well as the notion that, at the end of the analysis, there is no objective standard against which the results can be compared.

Q. Dr. Mayo asserts (at 11) that dedicated access is a critical component for the efficient provision of local exchange services to many businesses and, more importantly, that it is not only largely provided by Verizon MA, but is also unavailable at TELRIC rates. How do you respond?

A. I disagree with Dr. Mayo's implication that there is insufficient competition for the provision of dedicated access and his inference that dedicated access is not priced at economic costs.

First, as I've just said, the FCC addressed the issue of pricing flexibility for interstate special access and dedicated transport services in 1999. This is a clear indication that more than two years ago, the FCC considered there was sufficient competitive activity associated with the interstate special access service (which Dr. Mayo appears to be concerned about

[3] Before the Federal Communications Commission, *In the matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Interexchange Carrier Purchases of Switched Access Services offered by Competitive Local Exchange Carriers, Petition of U S West Communications, Inc. for Forbearance from Regulation as a Dominant Carrier in Phoenix, Arizona MSA*, Fifth Report and Order and Further Notice of Proposed Rulemaking, CC Docket Nos. 96-262, 93-1, 98-63, 98-157, FCC 99-206, Adopted August 5, 1999, ¶78.

here) to warrant recognition. Notably, in its first petition to the FCC for such relief, Verizon was granted Phase II relief (i.e., pricing flexibility on one-day tariff notice) in certain metropolitan service areas (MSAs) and non-MSA areas for access services provided by former Bell Atlantic telephone companies.[4]

Second, dedicated access services were one of the first local exchange services to experience significant competitive entry. Indeed, competitive access providers (CAPs) first began offering competitive dedicated access services to businesses in the mid 1980s in response to high margins on ILEC switched access services. Since then and because of CAPs ability to compete effectively against ILECs, there has been significantly less regulation of ILEC dedicated access services.[5] Massachusetts is no exception. There are a host of dedicated access service providers doing business in the state, and the ability of such competitors to enter the market, deploy infrastructure and serve customers indicates that barriers to entry are not prohibitively high.

Finally, I also disagree with any inference that prices for dedicated access might be unreasonably high. The fact that barriers to entering the market for dedicated services are low means that competition and the discipline of the market adequately constrain prices. Customers who purchase dedicated access are, therefore, paying just and reasonable market-determined prices. In fact, almost five years ago the FCC determined that dedicated access services were priced at or relatively close to cost. When determining the proxy rate for UNE dedicated transmission links, the FCC stated:

> For dedicated transmission links, states must use existing rates for interstate dedicated switched transport as a default proxy ceiling. We believe these rates are currently at or close to economic cost levels. Such rates were set based on

[4] Before the Federal Communications Commission, *In the Matter of Verizon Petitions for Pricing Flexibility for Special Access and Dedicated Transport Services*, CCB/CPD Nos. 00-24, 00-28, Adopted: March 13, 2001.

[5] See, *e.g.*, Before the Federal Communications Commission, *Expanded Interconnection with Local Telephone Company Facilities*, CC Docket Nos. 91-141 and 92-333, FCC Rcd 7369, 7454 as described *In the Matter of Access Charge Reform*, CC Docket Nos. 96-262, et al. FCC 99-206, released August 27, 1999.

> interstate special access rates, which we found based on the record in the *Transport* proceedings were relatively close to costs.[6] [footnote omitted]

Dr. Mayo's position that the dedicated access market is not competitive and that prices are unreasonably high is not credible.

Q. Dr. Mayo also asserts (at 11) that "the fact that access rates have been held above their economic cost for a prolonged period provides *prima facie* evidence that Verizon continues to enjoy significant monopoly power over the provision of such access." Do you agree?

A. No, I do not. Markups above incremental costs are necessary in an industry like telecommunications that is characterized by significant amounts of shared and common fixed costs. It is not possible to price telecommunications services at incremental costs. Dr. Mayo seems to be suggesting that the markup above incremental costs for access services is unreasonable and much higher than market-determined markups in competitive markets. I disagree.

Experience from other industries indicates that, in the face of significant fixed costs, prices systematically exceed marginal costs. For example, in the domestic long-distance telecommunications market, marginal cost estimates vary between $0.01 to $0.02 per conversation minute (excluding non-incremental costs such as marketing expenses and ignoring carrier access expenses) and $0.05 cents per minute (including marketing expenses).[7] Switched interstate access charges were about $0.028 cents per conversation minute in July 1998.[8] I estimate that, at that time, federal universal service fund

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[6] Before the Federal Communications Commission, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket 96-98, Released August 8, 1996¶ 821..

[7] Estimates of toll and access incremental costs are presented in Robert W. Crandall, *After the Breakup: U.S. Telecommunications in a More Competitive Era* (Washington D.C.: The Brookings Institution, 1991), at 138-141; Lewis J. Perl and Jonathan Falk, "The Use of Econometric Analysis in Estimating Marginal Cost," Presented at Bellcore and Bell Canada Industry Forum, San Diego, California (April 6, 1989), Table 2; Robert W. Crandall and Leonard Waverman, *Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications* (Washington D.C.: The Brookings Institution, 1996); and Paul W. MacAvoy, *The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Services* (Cambridge, Massachusetts: The MIT Press and Washington D.C.: The AEI Press, 1996). The costs are obviously averages and vary a great deal across jurisdictions, times of day and technologies.

[8] Federal Communications Commission, "Universal Service Monitoring Report", CC Docket No. 98-202 (September 2000), Table 7.15.

assessments and the Primary Interexchange Carrier Charge ("PICC") paid by AT&T to serve its residential customers, when added to access charges, came to about $0.06 cents per conversation minute.[9] Thus, AT&T's marginal costs of serving residential customers totaled $0.07 to $0.11 cents per conversation minute, depending on whether one counts marketing expenses or not. Those estimates of marginal costs lie significantly below interstate residential long distance prices. Using a public database of telephone bills of a random sample of U.S. residential households, I measured the average rate per minute actually paid by AT&T's customers for interstate domestic direct-dial phone calls, including a per-minute assignment of service charges, promotional credits, fixed monthly PICC flow-through charges, and a fixed monthly universal service fund assessment.[10] In July 1998, the average rate paid by AT&T residential customers was about $0.20 per conversation minute. Thus, AT&T's incremental contribution from residential customers was at least $0.09 per minute, even if one includes marketing expenses. ($0.20 – $0.11 = $0.09, if one uses the upper range of estimated network costs.) In contrast, as of July 1998, the LECs charged an average of $0.06 per conversation minute for carrier access and other fees whose incremental cost is less than $0.01 cent per conversation minute (less than $0.005 per access minute). This leaves a price-cost margin or contribution of about $0.05 per minute ($0.06 – $0.01 = $0.05) for the LECs. Thus AT&T, in the long-distance market that it asserts is competitive, appears to have imposed about twice the mark-up per minute that regulated incumbent local exchange carriers ("ILECs") impose on carrier access charges and other assessments on IXCs.

Alternatively, consider the $0.20 per minute that residential AT&T customers paid in July 1998. Of that $0.20, as much as $0.06 corresponds to incremental cost of supplying the

[9] In July 1998, the residential PICC was $0.95 for the first line and $1.77 for each additional line. *See id*., Table 7.14. The universal service fund ("USF") assessment was 3.93 percent. *See* Federal Communications Commission, Public Notice, *Proposed Third Quarter 1999 Universal Service Contribution Factors*, CC Docket No. 96-45, DA 99-1091, June 4, 1999. I have calculated AT&T's average cost of the PICC and USF per minute of serving its residential customers using a sample of residential bills from Market Facts, Inc. and PNR and Associates, Inc., *MarketShare Monitor*™ (September 9, 1998).

[10] My calculations use residential billing data from *MarketShare Monitor*™, *op. cit*. The calculations attribute domestic direct-dialed calling-plan subscription charges, service charges, and promotional credits between interstate and intrastate direct-dialed calls. The PICC and universal service charges are interstate.

service ($0.01 incremental cost of access plus as much as $0.05 incremental cost of toll). Of the remaining $0.14 markup of price above incremental cost, AT&T receives about $0.09, while the LECs receive about $0.05. Although interstate residential long distance prices are marked up significantly above incremental cost, about two-thirds of the markup recovers AT&T's shared fixed and common costs while only one-third remains to recover the shared fixed and common costs of the LECs. These numbers may not pertain precisely to the case of intraLATA toll and access services in Massachusetts, but they show that prices for telecommunications services can be expected to deviate substantially from incremental cost.

## III. DR. SELWYN'S SURREBUTTAL TESTIMONY

Q. Dr. Selwyn asserts (at 3) that the purpose of his surrebuttal testimony is to present a "valid case study" of his firm's experience, which he asserts (at 1) demonstrates there is insufficient competition for business local exchange service in Massachusetts. Please comment.

A. The experience that Dr. Selwyn characterized in his rebuttal testimony (at 65) as "admittedly anecdotal" appears to take new significance in his surrebuttal testimony where it is elevated to a "case study." Holding what we call Dr. Selwyn's story aside, I would remind the Department that (as an anecdote, a case study, or whatever) it represents a sample of only one event, and drawing conclusions from a sample of one frequently leads to the wrong conclusion.

Q. Does this conclude your testimony?

A. Yes.